

PATENT ABSTRACTS OF JAPAN

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(54) MANUFACTURE OF HIGH-STRENGTH DUST CORE

(57)Abstract:

PURPOSE: To obtain a high-strength compressed powder core by specifying the compressed powder density of a dust material in terms of density ratio, and employing a lubricant having a melting point higher than the setting temperature of a resin.

CONSTITUTION: When the melting point of the lubricant is lower than the setting temperature of the resin, the lubricant melts in the course of setting of the resin, thereby obstructing the required bonding to be obtained between the iron powder and the resin and also the formation of an excellent resin layer, which leads to a lowering in strength of the product. Therefore, the compressed powder density of the dust material is specified so as to be 82% or more by density ratio, and a lubricant having a melting point higher than the setting temperature of the resin is employed. Thus, it is possible to obtain a dust core having high magnetic flux density and high strength.